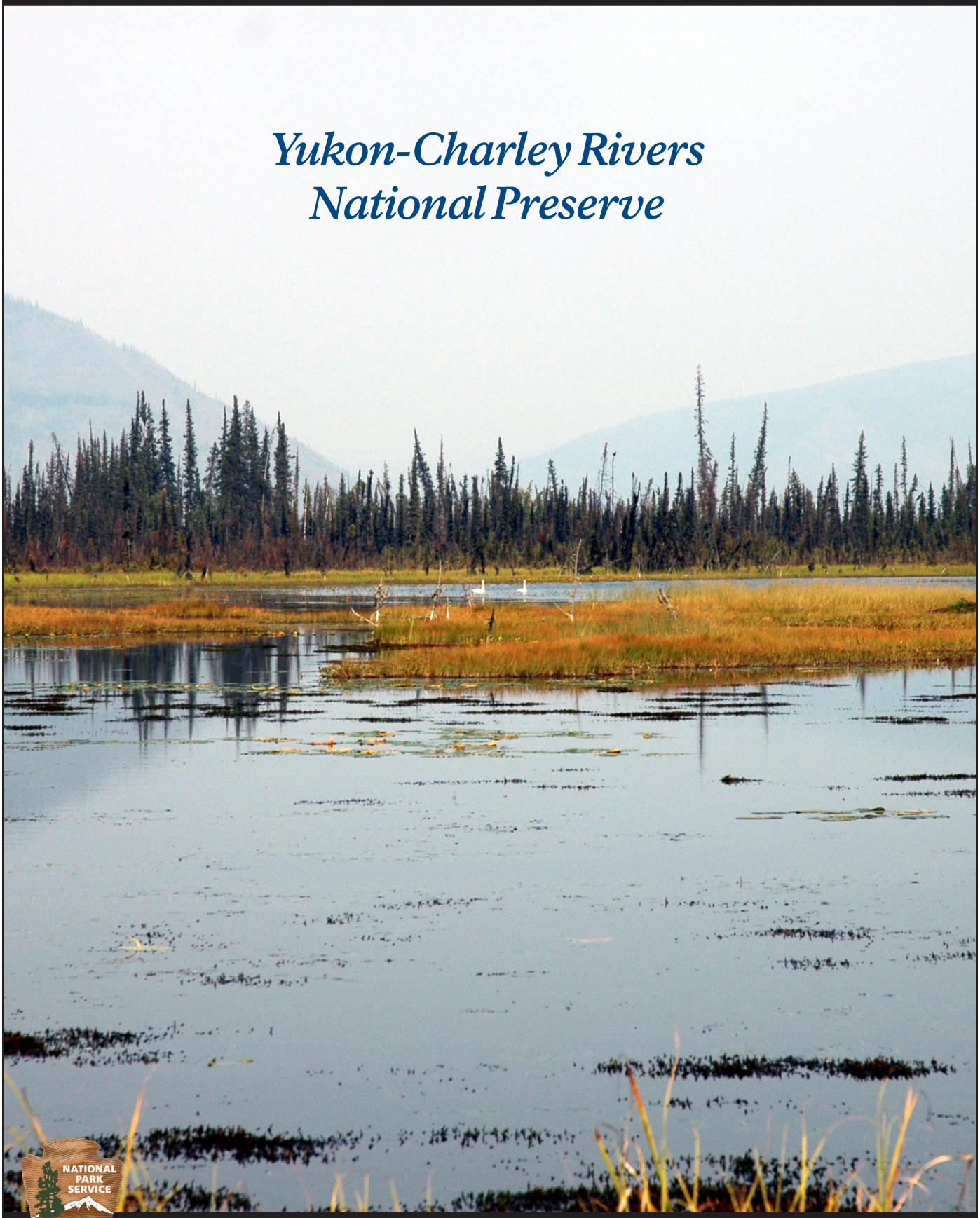
Annual Report **2005**

Yukon-Charley Rivers National Preserve



National Park Service
Department of the Interior

Break-up on the Yukon at Eagle.

"Swift or smooth, broad as the Hudson or narrow enough to scrape your gunwales, every river is a world of its own, unique in pattern and personality. Each mile on a river will take you further from home than a hundred miles on a road."

-Bob Marshall

Message from the Superintendent

Twenty-five years ago this December the Alaska National Interest Lands Conservation Act (ANLICA) became law and established Yukon-Charley Rivers National Preserve and expanded or established twelve other national parklands in Alaska. This Congressional Act added 54 million acres to the national park system representing two-thirds of the acreage in the entire system and three-fourths of our wilderness areas. This was perhaps the largest and most comprehensive piece of conservation legislation ever passed.

The first 25 years of management of the preserve have been challenging and also rewarding for all involved. We have many reasons to be grateful. Through the years we have been able to build important friendships with local communities around the preserve that have proven to be critical for the continuation of opportunities for customary and traditional activities and conservation of preserve resources. Through this act the American public inherited these 2.5 million acres of lands representing important aspects of our nation's historical, cultural and natural heritage. Every year more and more visitors from around the world experience the rich history and natural environments of this Yukon and Charley Rivers region of Alaska.

This annual report highlights some of our efforts to continue to understand, protect and help the visitors enjoy and appreciate this wonderful gift that our leaders bequeathed to the American public and the world 25 years ago. We continue to focus our efforts on understanding the natural and cultural wonders found within the park so that they will continue to be preserved and protected for the enjoyment and appreciation of future generations.

I am especially thankful for the privilege of being able to work with what may be one of the finest and most talented staff in the National Park Service. They, along with our many friends and partners, have made 2005 another extremely successful year in accomplishing many of our goals. I hope you enjoy reviewing some of these accomplishments highlighted in this report.

Dave Mills
Superintendent
December 2005

Purpose and Significance

Yukon-Charley Rivers National Preserve protects 115 miles of the 1,800-mile Yukon River and the entire Charley River basin. Rustic cabins and historic sites are reminders of the importance of the Yukon River during the 1898 gold rush. Paleontological and archeological sites add much to our knowledge of the environment thousands of years ago. Peregrine falcons nest in high bluffs overlooking the river, while rolling hills that make up the Preserve are home to an abundant array of wildlife. The Charley, a 100-mile wild river, is considered to be one of the most spectacular rivers in Alaska.

Purpose of Yukon-Charley Rivers National Preserve

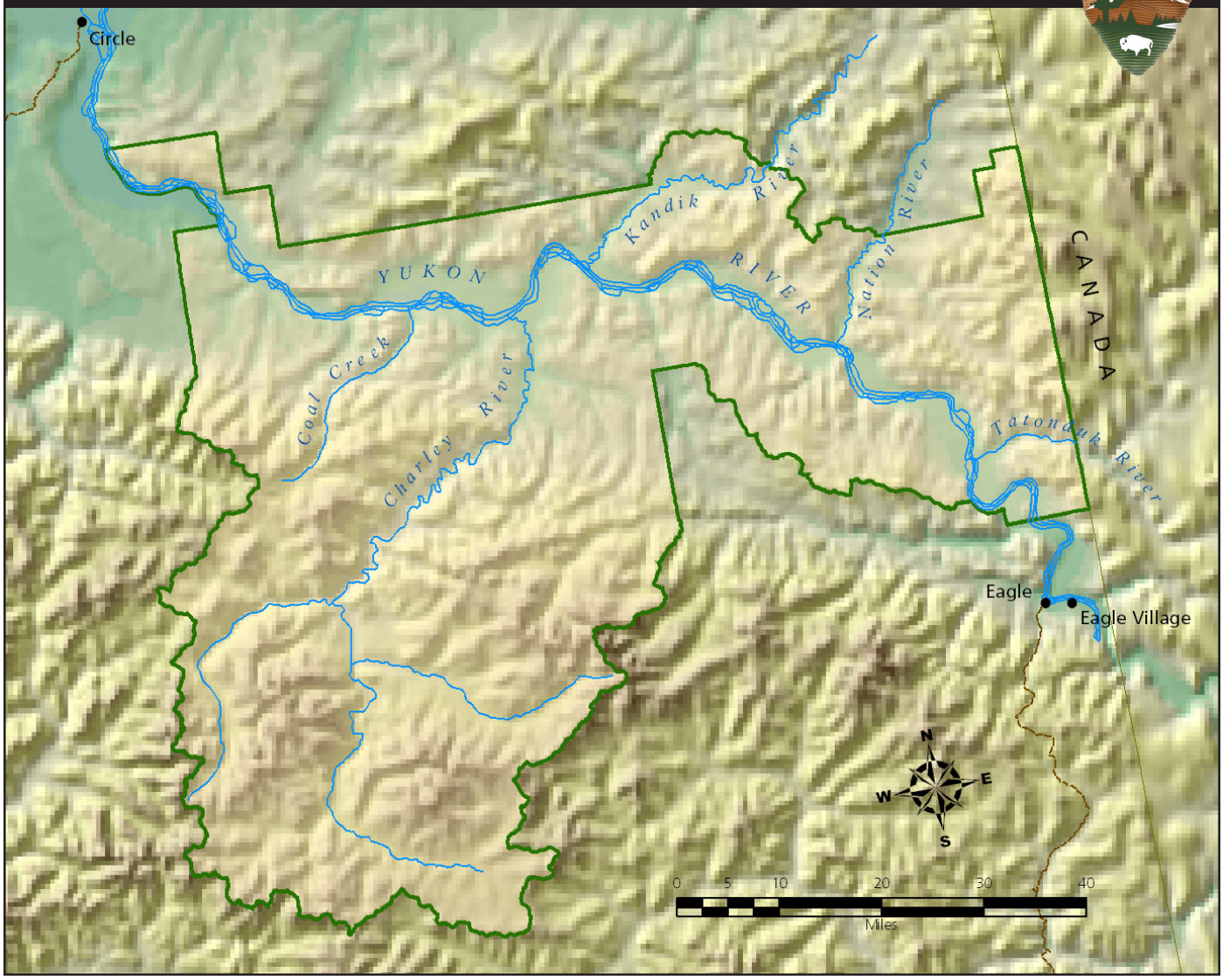
- Maintain environmental integrity of entire Charley River basin, including streams, lakes, and other natural features, in undeveloped natural condition for public benefit and scientific study;
- Protect habitat for and populations of fish and wildlife, including but not limited to peregrine falcons and other raptorial birds, caribou, moose, Dall sheep, grizzly bears, and wolves;
- And in a manner consistent with foregoing, protect and interpret historical sites and events associated with the Yukon River gold rush, and geological and paleontological history, and cultural prehistory of area; and
- Protect, conserve, and interpret natural and cultural resources of the Preserve while allowing for appropriate human uses in a manner that provides for similar opportunities for future use and enjoyment.

Significance of Yukon-Charley Rivers National Preserve

- An internationally significant assemblage of diverse geological and paleontological resources—unusually complete—provide at least a 600-million-year record stretching nearly back to the Precambrian era.
- The area between Nation, Kandik, and Yukon rivers is postulated to be a portion of the North American plate that has escaped deformation from geological forces, remaining geologically and paleontologically intact. Some of the oldest known microfossils have been found in this area.
- The entire Charley River watershed is protected in its undeveloped natural condition.
- The Preserve hosts one of the highest density populations of nesting American peregrine falcons in the United States.
- Portions of the Han and Kutchin Athabaskan traditional homelands lie within the Preserve.
- Sites preserving activities and events of regional significance associated with the gold rush era are present and exemplified by bucket dredges, mail trails, trapper's cabins, boats, roadhouses, water ditches, and machinery.
- The Yukon River is the largest natural, free-flowing river in the National Park System.
- Large areas within the Preserve may represent an unglaciated refugium for endemic floral and faunal communities.

Yukon-Charley Rivers National Preserve

National Park Service
U.S. Department of the Interior



Yukon-Charley Rivers National Preserve lies in eastern interior Alaska, bordering Yukon Territory, Canada. The Taylor Highway will take visitors as far as Eagle, where the Preserve's field office and Visitor Center is located. Travellers into the Preserve typically float the Yukon River, or charter an airplane to fly into the upper Charley River. Visitors are encouraged to check in at the Eagle field office to file a travel plan prior to their trip.

Within the Preserve, NPS staff maintain facilities, including a public use cabin at Coal Creek Camp, which serves as a base for many resource projects. At Slaven's Roadhouse on the Yukon River, visitors may enjoy learning about the rich mining history of the area.

Table of Contents

Message from the Superintendent.....3

Purpose and Significance of Yukon-CharleyRivers National Preserve.....4

Map of Yukon-Charley Rivers National Preserve.....5

Performance and Results Section.....7-21

Preserve Resources.....7-18

Public Enjoyment and Visitor Experience.....19-20

Organizational Effectiveness.....21

FY 2003 Financial Summary.....22

Preserve Organization.....23

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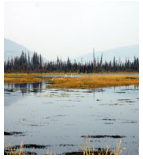

Cover photo: Trumpeter swans swim in a lake near the Yukon River in Yukon-Charley Rivers National Preserve.

Biological Technician Nick Lisuzzo samples water quality and vegetation on a pond near the Yukon River in Yukon-Charley Rivers National Preserve.

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Preserve Resources

Natural and cultural resources and associated values at Yukon-Charley Rivers National Preserve are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.

Long-term Goal: Archeological Sites: By September 30, 2008, 2% (5) of Yukon-Charley Rivers National Preserve's archeological sites listed in ASMIS (209) without accurate condition assessment are visited, are in good condition and ASMIS updated.

Annual Goal: By September 30, 2005, 2% (5) of Yukon-Charley Rivers National Preserve's archeological sites listed in ASMIS (209) without accurate condition assessment are visited, are in good condition and ASMIS updated.
GOAL ACHIEVED

Archaeological Survey and Mapping of Coal Creek Historic District

By Jeff Rasic

A three year project aimed at mapping and documenting the extensive array of historic buildings, structures and archaeological features that make up the Coal Creek historic district was concluded in 2005. The work was undertaken by Yukon-Charley cultural resources staff, GIS specialists from the NPS Alaska regional office, and students and faculty from the Industrial Archaeology program at Michigan Technological University.

The project created a comprehensive and detailed map of all the known buildings, artifact scatters, machinery, and landscape modifications (such as ditches, trails, and tailings) in the historic district. In all, 280 features were mapped and described with site forms, measured drawings and more than 1,500 photographs. The project resulted in intensive survey coverage of 900 acres and documentation of 34 archaeological sites. One of the major products of the project was a GIS that links map data to photographs and other descriptive information useful for management and interpretive purposes.

Pat Baird, a graduate student at Michigan Technological University, completed a Master's thesis related to the project and wrote a project report. Pat also presented his findings at the annual meeting of the Society for American Archaeology.

The 2004 Woodchopper fire near Coal Creek revealed a few new archaeological sites such as this extensive can and artifact scatter. The Burned Area Emergency Response program funded the 2005 archeological survey.

Another Busy Fire Season in 2005

By James Savage

The Yukon-Charley Rivers Fire Management program had a full slate in 2005. The program managed three wildfires in the Preserve, two as Wildland Fire Use incidents, and one as a limited suppression fire. In addition to the fires, fire staff also performed Burned Are Emergency Response (BAER) assessment and mitigation from the 2004 fire season, fire ecology field work, interagency support of fires in Alaska, hurricane response in the Lower 48, and prescribed fire support in New Mexico and Arizona.

Fire Management
Maintain natural processes, such as fire, to the greatest degree possible while protecting human life, private property, cultural sites, critical habitat and endangered species.
From the Yukon-Charley Rivers Resource Management Plan

3 Fires Scorch Yukon-Charley

Lightning storms in early June started the Trout Creek, Hosford Creek, and Charley Creek 1 fires. Trout Creek started near the Trout Creek cabins; Alaska Fire Service smokejumpers were dispatched, successfully protecting the structures at the mouth of Trout Creek. With the cabins protected, the fire was managed as a Wildland Fire Use for Resource Benefit, and burned from June 13 until it was declared out September 26. Charley Creek 1 was a limited suppression fire that burned into the Preserve on July 16, and burned until September 26. Other than mapping and monitoring, no management actions were taken on Charley Creek 1. Hosford Creek was a Wildland Fire Use for Resource Benefit that was discovered on June 17. It was 60 acres upon discovery and showed little growth or activity.

Photo: View of Trout Creek Fire, Michigan Creek drainage, July 14, 2005.

Fires that burned in Yukon-Charley Rivers National Preserve, 2005:

Fire Name	Acreage	Duration
Charley Creek 1	73,345.6	109 days
Trout Creek	5,862	107 days
Hosford Creek	60	11 days

Assessing and Mitigating Impacts from 2004 Burn

In 2004, the Woodchopper fire burned lands within the Coal Creek Historic Mining District. Due to concerns about the Woodchopper fire's impact on watershed hydrology, cultural resources, invasive plants, and hazard trees, Burned Area Emergency Response (BAER) funds were appropriated to assess and mitigate these impacts.

An assessment by Hydraulic Mapping and Modeling, Inc., concluded that, due to previous disturbance by placer mining, there would be little impact from fire, except at Beaton Pup, where they recommended replacing two 24" culverts with a single 48" culvert. Maintenance staff is awaiting wash out of the current culverts before replacing them with a new, larger one.

Cultural Resources staff surveyed the Coal Creek drainage in June, and determined that the Sam Harvey cabin was at risk. In September, Cultural Resources staff covered the site with erosion preventing burlap.

NPS Alaska Regional Invasive Plant Ecologist Jeff Heys and his crew surveyed the Coal Creek drainage and identified two new invasive plant species: Smooth Brome Grass (*Bromus inernis*) and Narrow-Leaf Hawksbeard (*Crepis tectorum*). The invasive plant team manually treated the area where these invasives were found, a total of 0.1 acre.

The final impact of the fire was a number of trees with weakened root structures in the vicinity of roads and trails frequented by visitors. During the week of June 21, six sawyers from Eagle Village, the native village neighboring Eagle, were contracted to fall and remove any hazard trees along the roads and trails within the Coal Creek drainage. The crew mitigated 4.5 miles of trail that was affected by the Woodchopper fire, including the upper road, the lower road from Slaven's Roadhouse to the Coal Creek dredge, the road to Woodchopper up to the Cheese Camp turnoff, and the foot trail from Slaven's to the dredge.

NPS Forestry Technician James Savage works with archeologist Pat Baird of Michigan Technological University to assess fire effects on cultural resources like this boiler at Cheese Camp in the Coal Creek drainage following the Woodchopper fire of 2004.

In 2004, the Woodchopper fire burned lands within the Coal Creek Historic Mining District. Due to concerns about the fire's impact on watershed hydrology, cultural resources, invasive plants, and hazard trees, Burned Area Emergency Response funds were appropriated to assess and mitigate these impacts.

Fire Team Answers the Call of Duty

As if the fire season at Yukon-Charley Rivers wasn't busy enough, Fire Management staff were still able to assist with other incidents and agencies outside the Preserve.

James Savage spent 14 days on off-district assignment this year, on the Chapman Creek fire, and the Boundary Fire. He was sent as a Helicopter Manager trainee, and was able to complete his Helicopter Manager taskbook.

Kristi Bulock spent 63 days on off-district assignments this year. She spent 14 days as a strike team leader on the Talbiksok fire outside McGrath in southwest Alaska, 25 days as a unit leader with the Type 1 Alaska Incident Command Team in Alabama and Mississippi assisting the Federal Emergency Management Agency with hurricane disaster response, and 24 days with the Southwest Fire Use Training Academy working to complete her Burn Boss Type 2 taskbook.

Fuels Technician James Savage take a short break during another intense fire season in 2005.

Severe fire impacts can be seen in this once closed canopy black spruce plot that burned in 1986 and again in 2004.

Fire Ecology Research

Yukon-Charley Rivers fire staff actively supported four fuels and fire ecology projects in 2005:

- Three of five paired plots from the 1986 Eureka Creek fire burned again in 2004. These plots provide an opportunity for long term ecological monitoring on fire effects in Yukon-Charley.
- Two UAF researchers, Dr. Dave Verbyla and Andrew Ruth, were provided aviation support to investigate successional trajectories as determined by burn severity in the Eureka Creek fire of 1986.
- Preserve fire staff also read four pre-fire/post-fire plots, and established three new "pre-post" plots in the Coal Creek drainage. The purpose of this project is to relate fire behavior, burn severity, and duff moisture, and to assess vegetation and soil changes post fire.
- Forty-two hazard fuels plots were read at seven cabin sites for the hazard fuels treatment study. The purpose of this study was to evaluate the effectiveness of fuels treatment and determine the necessary return interval for hazard fuel reduction projects within the Preserve.

Hazard Fuels: excessive live and/or dead wildland fuel accumulations (either natural or created) having the potential for the occurrence of uncharacteristically intense wildland fire.

Director's Reference Manual 18, Chapter 10

The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

Long-term Goal: Natural Resources. By September 30, 2008, 14 of 14 natural resource inventories or research projects (annual or final report) ("obtain or develop natural resource information") for Yukon-Charley Rivers National Preserve that are identified in a Resource Management Plan, General Management Plan, or CAKN Phase III Document are completed.

Annual Goal: By September 30, 2005, 2 additional (8 total) natural resource inventories or research projects (annual or final report) ("obtain or develop natural resource information") for Yukon-Charley Rivers National Preserve that are identified in a Resource Management Plan, General Management Plan, or CAKN Phase III Document are completed.
GOAL ACHIEVED

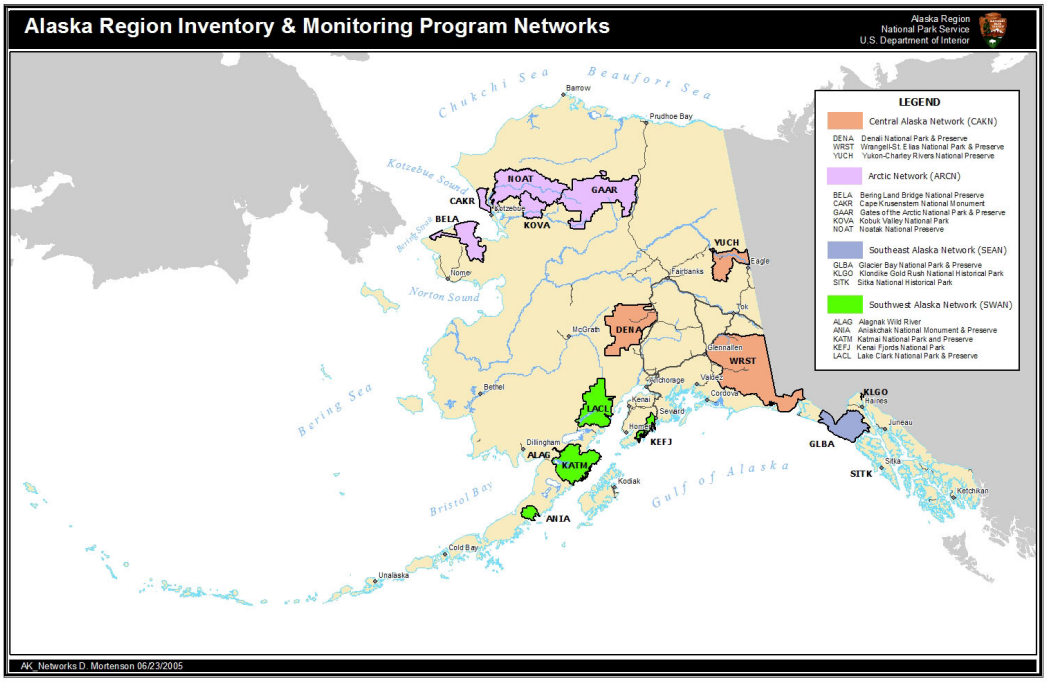
A Genetic Baseline of Wolves

By Melanie Cook

In a new aspect of on-going wolf population monitoring in Yukon-Charley Rivers, we assessed the baseline levels of genetic variation among wild wolves of Yukon-Charley Rivers National Preserve and Denali National Park and Preserve. Working cooperatively with the USGS Alaska Science Center Molecular Ecology Laboratory, samples from 154 wolves (102 from YUCH, 52 from DENA) were analyzed genetically. Microsatellites, the Polymerase Chain Reaction (PCR) and mitochondrial-DNA sequencing, were used to determine levels of heterozygosity, allelic composition, inbreeding and interbreeding within and among packs. Determination of this baseline genetic structure, together with radio-telemetry data provided better information to monitor the "natural and healthy" status of this population as mandated by the Alaska National Interest Lands Conservation Act of 1980.

The mitochondrial-DNA sequencing results revealed many shared DNA types among wolves in both parks but also a few DNA types unique only to YUCH or DENA. This suggests that although interbreeding (genetic exchange) is occurring among the wolves in both parks, some genetic divergence has occurred. This might be due in part to the great distance and rugged terrain (over 300 miles) separating the parks.

The microsatellite results were used to test hypotheses about relatedness of individuals and packs to one another within and among both parks. The next step is to assemble wolf pedigrees for each park. In addition, these data revealed high levels of genetic variation (allelic composition and heterozygosity) indicating healthy levels of interbreeding (gene flow) among wolves of both parks. Inbreeding was not detected among wolves in either park.



The Alaska Region is divided into four networks: Central Alaska Network (CAKN), Arctic Network, Southeast Alaska Network, and Southwest Alaska Network. Yukon-Charley Rivers National Preserve is one of three parks in the Central Alaska Network, which also includes Denali National Park and Preserve, and Wrangell-St. Elias National Park and Preserve. CAKN completed its Vital Signs Monitoring Plan in 2005. The Plan details how a monitoring program of Yukon-Charley's "vital signs" will be implemented. Initial vital signs monitoring at Yukon-Charley will include air, climate, snowpack, and vegetation. The remaining vital signs will be phased in over the next four years.

Vital Signs Monitoring Plan Completed

By Maggie MacCluskie

Knowing the condition of natural resources in national parks is fundamental to the National Park Service's ability to manage park resources. The Vital Signs Monitoring Program is a key component in the Service's strategy to provide scientific data and information needed for management decision-making and education. Vital signs also contribute information needed to understand and to measure performance regarding the condition of watersheds, landscapes, and biological communities. Yukon-Charley Rivers National Preserve is one of three parks/preserves that constitute the Central Alaska Network (CAKN) for Vital Signs Monitoring. This network, composed of 21.7 million acres of NPS land, also includes Wrangell-St. Elias National Park and Preserve (WRST) and Denali National Park and Preserve (DENA).

During 2005, CAKN reached the programmatic milestone of completing the Vital Signs Monitoring Plan. This document describes in full detail the ecological thinking behind what will be monitored (the "vital signs" of the network), the schedule for accomplishing the monitoring, and how the program will be implemented. After under going a thorough scientific review, the Monitoring Plan received full approval by Washington for implementation during the 2006 fiscal year. In addition to completing the Monitoring Plan, the network produced full protocols, or the complete instructions on how to conduct monitoring, for 11 vital signs. At present most of the protocols are under scientific review. Four of the protocols (Air, Climate, Snowpack and Vegetation) have been formally approved for implementation and data collection for these will commence during 2006.

Yukon-Charley staff contributed significantly to the development of the monitoring plan and to the production of the vital sign protocols. Natural Resource staff of Yukon-Charley serve as Principal Investigators or Co-Principal Investigators for 5 vital signs.

Also noteworthy during 2005 was the installation of a climate monitoring station in Yukon-Charley. This station underwent an integrated compliance process (see following article, next page). Moreover, near-real-time data are available on the web at http://www.wrcc.dri.edu/NPS.html.

Permanent Installations in Special Management Areas

By Steve Ulvi

All proposed activities that may impact the environment, visitor experience or other purposes for which an NPS unit was established require evaluation in an integrated compliance process. The most challenging proposals are those agency activities that have elements that create a conflict in managing for the legal purposes for which the unit was established.

Climate change is rapidly becoming a significant, everyday reality in northern park area management. Climate is a most basic and powerful driver of ecosystem form and function. The magnitude of change and complexity of feedback loops in a rapidly warming climate promise to make resource and human use management decisions even more vexing over the next few decades. Sorting out cause and effect in establishing the course for management actions requires reliable, long-term data sets. No public purpose for the area will be unaffected by these profound environmental changes.

Yukon-Charley Rivers contains both Wilderness Study Areas and National Historic Districts, two prominent examples of many NPS special management areas that elevate the protection of certain types of resource values. Effective management of these areas often requires additional constraints for human activities beyond those usually employed for park backcountry. Potential impacts (whether beneficial or adverse) to these overarching cultural and wilderness resource values must be carefully assessed, compared in a range of alternatives, and directly addressed in specific impact topics in an environmental compliance document.

In 2005, a decision was made to install permanent climate monitoring stations in special management areas within Yukon-Charley Rivers following an Environmental Assessment and Finding of No Significant Impact. A fully integrated compliance process allows for differences in policy interpretation and professional judgment within a highly diverse staff—resource personnel, managers, operations staff—to be aired and addressed in a timely and effective manner. This kind of process necessitates full-disclosure analysis, reduces public controversy, promotes narrowly tailored and well-reasoned decisions, and creates a reliable administrative record that should preserve public trust and agency discretion.

A fully integrated compliance process allows for differences in policy interpretation and professional judgment within a highly diverse staff—resource personnel, managers, operations staff—to be aired and addressed in a timely and effective manner.

The newly installed climate monitoring station at right rests on a low ridge in the southeastern headwaters of the Charley Wild River. The station continually records data on temperature, wind, and relative humidity, which is transmitted to the web at *http://www.wrcc.dri.edu/NPS.html.*

American peregrine falcon nestlings. Feather samples are collected from nestlings for contaminants monitoring. The U.S. Fish and Wildlife Service has analyzed samples from the upper Yukon over the past 30 years and found that mercury contamination has been increasing. Current levels may be near those that would affect reproductive success.

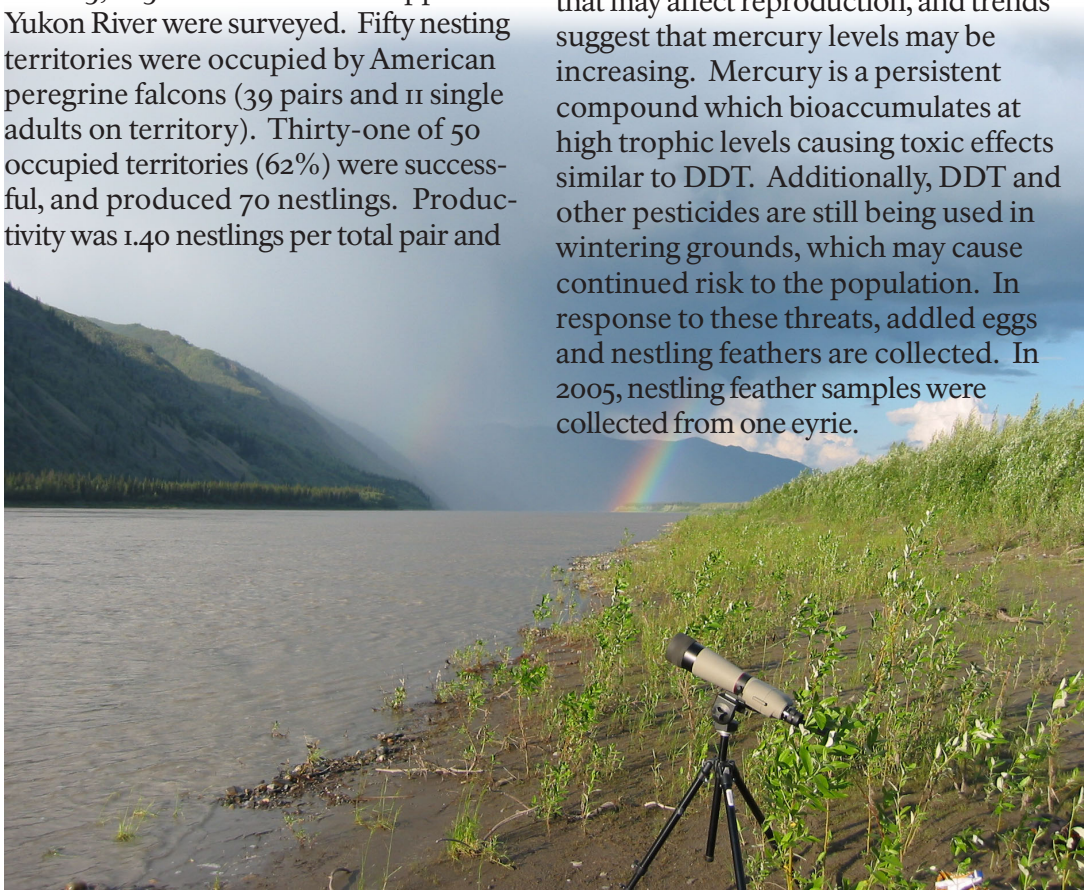
Monitoring Continues for American Peregrine Falcons

By Nikki Guldager

American peregrine falcons along the upper Yukon River, Alaska, have been monitored almost continuously since 1973. This and other local populations in interior Alaska have increased steadily since the late 1970s, following the ban of DDT in the United States in 1972, and their listing as endangered in 1973 under the Endangered Species Act. In August 1999, the American peregrine falcon was removed from the list of Threatened and Endangered Wildlife. The upper Yukon River population continues to be monitored for trends and contaminants through a cooperative effort of the National Park Service Inventory and Monitoring Program, Yukon-Charley Rivers National Preserve, and U.S. Fish and Wildlife Service.

In 2005, 265 kilometers of the upper Yukon River were surveyed. Fifty nesting territories were occupied by American peregrine falcons (39 pairs and 11 single adults on territory). Thirty-one of 50 occupied territories (62%) were successful, and produced 70 nestlings. Productivity was 1.40 nestlings per total pair and 2.26 nestlings per successful (≤1 nestling observed) pair. Between 1975 and 2005, the number of nestlings produced, and total and successful pairs nesting along the upper Yukon River has been steadily increasing, though the percentage of total pairs nesting successfully has been declining. This may be attributable to increased competition for resources due to increased density, birds moving into sub-optimal territories (i.e. territories with insufficient resources and cover from predators), and/or inexperienced pairs. Further monitoring is required to obtain a better understanding of the breeding biology of a recovered population of American peregrine falcons.

Recent contaminants analyses of peregrine falcon eggs from the upper Yukon River suggest that mercury is currently at levels that may affect reproduction, and trends suggest that mercury levels may be increasing. Mercury is a persistent compound which bioaccumulates at high trophic levels causing toxic effects similar to DDT. Additionally, DDT and other pesticides are still being used in wintering grounds, which may cause continued risk to the population. In response to these threats, addled eggs and nestling feathers are collected. In 2005, nestling feather samples were collected from one eyrie.



Territories of American peregrine falcons are observed from sites along the banks of the Yukon River with spotting scopes and binoculars. (Photo by Angela Matz, USFWS.)

Long-term Goal: Museum Objects. By September 30, 2008, the number of Yukon-Charley Rivers National Preserve museum objects cataloged and submitted to the National Catalog is increased from 9,105 in FY2001 to 12,150 (a 33% increase).

Annual Goal: By September 30, 2005, the number of Yukon-Charley Rivers National Preserve museum objects cataloged and submitted to the National Catalog is increased from 9,105 in FY2001 to 11,934 (a 31% increase).
GOAL EXCEEDED

Museum Collections Highlights

By Jeff Rasic

Yukon-Charley maintains a collection of 22,510 historical objects, photographs, archival materials, and archaeological, botanical, and paleontological specimens. Among the collections are prehistoric stone tools, vertebrate and invertebrate fossils, historic photographs and maps of early 20th century gold mining activities, and an extensive collection of subarctic plants. In 2005 park staff accessioned 1,161 new items, primarily archival materials related to recent resource projects.

Eagle Village elder Mathew Malcolm checks his net for king salmon with help of Eagle residents Barry, Amanda and Emma Westphal.

Ethnography of Yukon Salmon Fisheries

By Dave Krupa

Research continued on a project funded by the U.S. Fish and Wildlife Service to document local subsistence knowledge and practices concerning the Yukon River salmon fishery. Topics include local observations about the status and health of the salmon runs, harvest and processing techniques, and recommendations for better management of the fishery. Two teams of locally recruited interviewers conducted the interviews with assistance from Preserve Cultural Resource staff. The local interviewers were Jonathan Beck and Howard David of Eagle Village, and Cindy Gowins, Stacey Pare' and Jan Parish of Eagle. Accomplishments so far include:

- Researchers recorded almost 25 hrs of audio and video with 15 local fishers.
- In addition to recording local observations and perceptions about the fishery, fishing and processing techniques were documented whenever possible.
- Recordings provide an important local record of information and insights into fisheries upon which subsistence life is based.
- Results so far indicate that both king and fall chum fisheries are extremely important to local residents, and

that some of the individually harvested salmon are shared or traded with other community members, confirming the importance of the fishery even to those who do not engage in the practice.

The 2-year project continues in 2006 with Circle and Central residents and will result in a summary report along with a DVD sampler that highlights local knowledge about this important fishery. Original recordings from this project may eventually be migrated to the Jukebox program.

Terry and Mary Ann McMullin on the deck of their Eagle cabin along the Upper Yukon River. Terry was interviewed about his decades of experience fishing for king and chum salmon.

Sonja Sager is interviewed by Stacey Pare' at Sonja's owner-built cabin in Eagle. Sonja's son Finn is seated on her lap.

Yukon Salmon on the Mend

By Fred Anderson

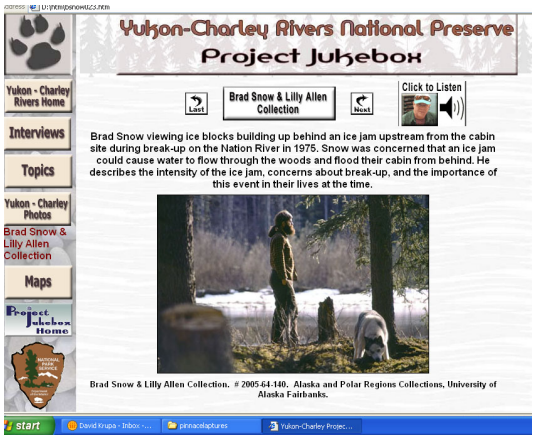
After a dramatic but still poorly understood collapse which began in late 1990's, Yukon River salmon runs seem to be recovering. Upper Yukon area subsistence fishermen enjoyed a strong chinook salmon run and generally good fishing conditions in 2005. Escapements were at or near desired levels. As in recent years, fishers continue to note that big fish (over 30 lbs.) have become a rarity and speculate they are being selectively removed from the runs by large mesh gillnets.

This year's fall chum salmon run was thought to be the biggest in 30 years and was estimated at about 2 million fish. Escapement goals throughout the Alaska and Canadian portions of the drainage were met or exceeded.

Jukebox Continues to Grow

By Dave Krupa

In the early 1990's, and in cooperation with the University of Alaska Fairbanks Oral History Program, NPS sponsored development of multimedia oral history databases that allow park planners, staff, local communities, and virtual visitors to hear and experience accounts of life in and around Alaska's premier parks and preserves. Dubbed "Project Jukebox," oral recordings are integrated with maps, pictures, and text in an interactive computer program. The project continues to expand. Developments in 2005 to Yukon-Charley Rivers' Project Jukebox include:



Former Upper Yukon River resident Brad Snow selected almost 150 images from his collection for duplication and inclusion in Jukebox. Brad and his then partner Lilly Allen were among a small number of hardy adventurers who arrived on the Yukon River in the 1960s and 70s, eager to try their hand at living off the land.

- Improvement by the addition of hundreds of photographs. Former Upper Yukon River resident Brad Snow selected almost 150 images from his collection for duplication and inclusion in Jukebox. He also provided audio captions for the images. The slideshow provides a rare glimpse of the "river people era" that John McPhee chronicled in his classic book, *Coming into the Country*. Brad's audio-captioned slideshow brings this era to life and wonderfully conveys the spirit of those times.
- All Project Jukebox programs have been migrated to a web accessible format and the entire corpus of programs can now be found at: www.uaf.edu/library/jukebox.

Linking People to their Preserve

By Dave Krupa

Cultural Resource staff provided liaison assistance to other park programs as they partnered with Eagle and Eagle Village residents on a number of projects. Cultural Resource staff briefed the Eagle Village Council about opportunities for seasonal work on NPS projects, and helped coordinate the NPS Fire program recruitment of Eagle Village sawyers for fire rehabilitation work at Coal Creek Complex.

Also, Cultural and Subsistence programs partnered with the Eagle Village Council and local businesses to host a welcoming potluck for the Federal Subsistence Board, which visited Eagle/Eagle Village for two days in mid-July 2005. Yukon-Charley Rivers Superintendent David Mills was officially recognized at the event for his continuing efforts to work collaboratively with local residents in maintaining, interpreting, and protecting Preserve resources.

Provide for the Public Enjoyment and Visitor Experience

Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of preserve facilities, services, and appropriate recreational opportunities.

Long-term Goal: Visitor Satisfaction. By September 30, 2008, 90% of visitors to Yukon-Charley Rivers are satisfied with appropriate park facilities, services, and recreational opportunities.

Annual Goal: By September 30, 2005, 90% of visitors to Yukon-Charley Rivers are satisfied with appropriate park facilities, services, and recreational opportunities.
GOAL EXCEEDED

High Adventure on the Yukon

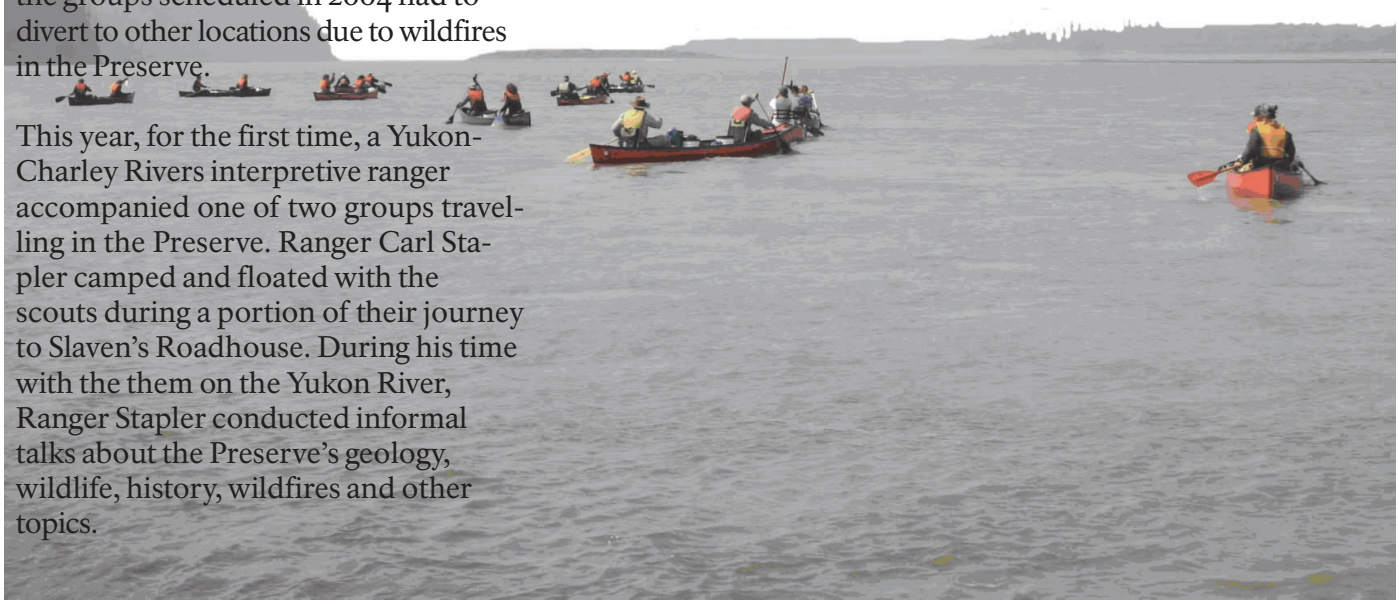
by Pat Sanders

Boy scouts from troops 94 and 20 in Pennsylvania, accompanied by the Midnight Sun Council of the Boy Scouts of America in Fairbanks, canoed down the Yukon River from Eagle to Slaven's Roadhouse in Yukon-Charley Rivers, and then on to Circle. The Midnight Sun scouts have lead trips through the Preserve since 2001 as part of their High Adventure Base Camp program. Each year, two or three groups of scouts from around the USA have taken part in these trips, although the groups scheduled in 2004 had to divert to other locations due to wildfires in the Preserve.

This year, for the first time, a Yukon-Charley Rivers interpretive ranger accompanied one of two groups travelling in the Preserve. Ranger Carl Stapler camped and floated with the scouts during a portion of their journey to Slaven's Roadhouse. During his time with the them on the Yukon River, Ranger Stapler conducted informal talks about the Preserve's geology, wildlife, history, wildfires and other topics.

While at Slaven's, the scouts conducted a service project, as they do each time they are there. They also had a "Formal Dinner." Ranger Stapler conducted a tour of the Coal Creek Dredge, part of the Coal Creek Historic Mining District, as is Slaven's Roadhouse, before the scouts departed for Circle.

Yukon-Charley Rivers staff are looking forward to conducting similar trips with the High Adventure Base Camp program in the future.



Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

Long-term Goal: Visitor Understanding and Appreciation. By September 30, 2008, 80% of Yukon-Charley Rivers visitors understand the significance of the Preserve.

Annual Goal: By September 30, 2005, 80% of visitors will understand the significance of the Preserve.
GOAL EXCEEDED

Local School Kids Enjoy Field Trip into Yukon-Charley

by Pat Sanders

In September, 2005, 14 students from Eagle participated in a 2-day educational outreach program with Yukon-Charley Rivers staff. The students, their science teacher and two chaperones traveled to Coal Creek via Preserve boats with NPS staff to conduct water quality tests and to tour the Coal Creek Historic Mining District.

Many of the students climbed Slaven's Dome for a birds-eye view of Coal Creek's valley, and saw two large faults that opened on the Woodchopper road last August. The group also saw results of last year's Nation, Edwards and Woodchopper fires, and this year's Trout Creek fire. They toured Coal Creek dredge before returning to Eagle to analyze the samples they collected. In journal entries the students made in the Beaton Pup Camp visitor journal, many students wrote that they wished the field trip could have been longer. As with the Boy Scouts, the Preserve staff looks forward to future programs with the students.

Many students wished the field trip could have been longer.

Chaperone Greg Cecas studies aquatic samples with Eagle high school student Clint McElfresh.

Ensure Organizational Effectiveness

The National Park Service uses current management practices, systems, and technologies to accomplish its mission.

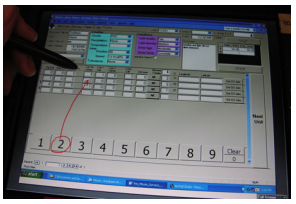
Computing Hits the Field

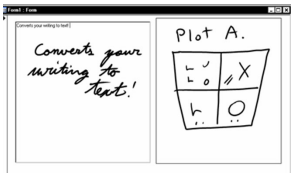
By Doug Wilder

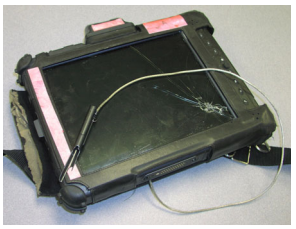
This summer, Central Alaska Network field tested rugged tablet computers in Yukon-Charley Rivers. The durable, waterproof and GPS-enabled tablets were used to collect lake monitoring data, doubling as a navigation aid. Since the tablet sports a full Windows XP operating system, researchers can now take their database application to the field for direct data entry.

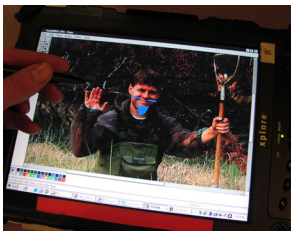
One aim of the Inventory and Monitoring program is to make data available to park managers as soon as possible so they can base decisions on sound science. Tablets streamline the process of collecting and processing data, resulting in significant time savings. Eliminating the need to transcribe data from a hand written notebook into a computer not only saves time, it also drastically reduces errors that result from the transcription process. Data input forms that utilize pick lists and other constraints also contribute to error reduction as well as standardization. Data can essentially be quality checked as it's collected.

Rugged tablets open up a world of possibilities for enhancing field work. The CAKN vegetation crew is planning to put a digital version of the giant *Flora of Alaska* book on the tablet for reference in the field. Ancillary databases and field forms such as bear observations can now easily be brought to the field. Digital photos can be viewed immediately on the 10" tablet screen and annotated by hand. And hand writing can still be used to capture critical notes.









Above, from top:
Programmed data entry forms save time and reduce error. It also allows for easy data entry by using a stylus to "tap" in numbers.
Hand writing can be converted to type or left as free-hand.
Despite the damage, this tablet kept on collecting data and was later repaired.
Photos can be quickly viewed and annotated on the spot.

Durable, waterproof and GPS-enabled tablets were used to collect lake monitoring data and doubled as a navigation aid in Yukon-Charley Rivers National Preserve.

Financial Summary

What do we do? studies... compliance... construction... educational programs... restoration... planning...

Operating Budget Base Allocations (ONPS) Expenditure Highlights

$400,000 for Research and Studies

We conducted considerable cultural resource work, including historical and archaeological studies, in Coal Creek and other parts of the preserve. Many natural resource studies included collaborative studies with other agencies and the Central Alaska Inventory and Monitoring Program. Compliance reviews of projects were active and wildlife regulatory management was very active under federal and state systems.

$380,000 for Resource Protection and Visitor Services

Interpretive programs increased in Eagle due to regular tour boat and bus tours. Outreach and educational programs with school groups utilized the newly restored Coal Creek Camp. Wildlife patrol and enforcement also increased due to increasing numbers of hunters using the preserve. Numerous wildlife violation cases were made.

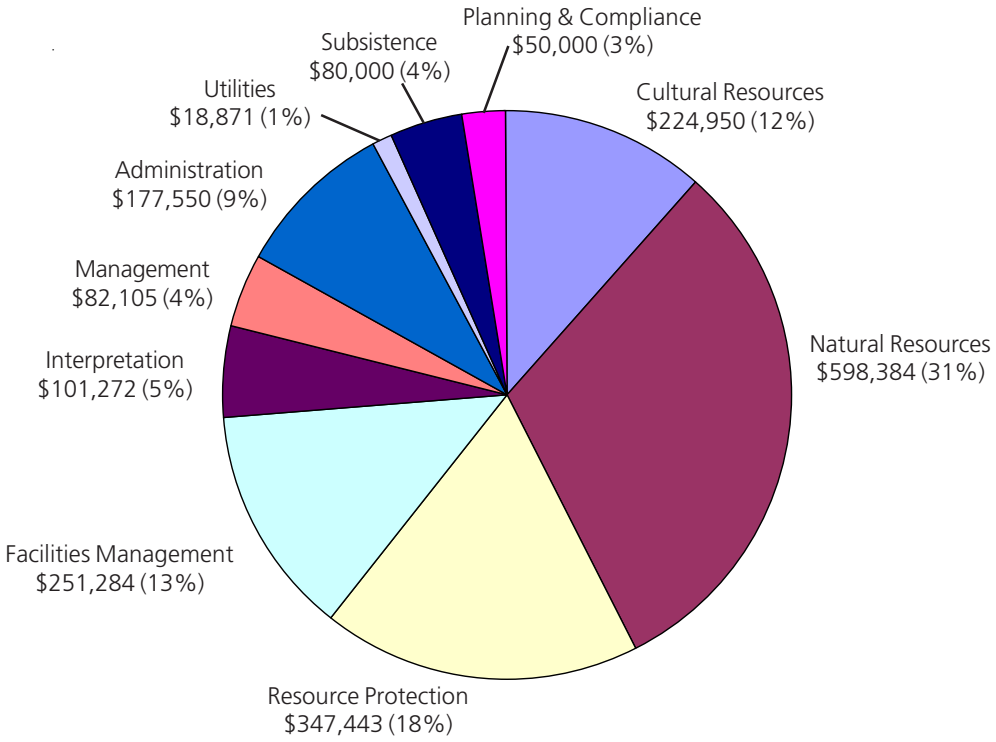
$180,000 for Facilities Operation and Maintenance

We maintained over 50 facilities in Eagle and throughout the preserve and absorbed increasing utilities costs. We completed a comfort station next to the Eagle Visitor Center. A solar system installed at Coal Creek decreased the reliance on fossil fuels.

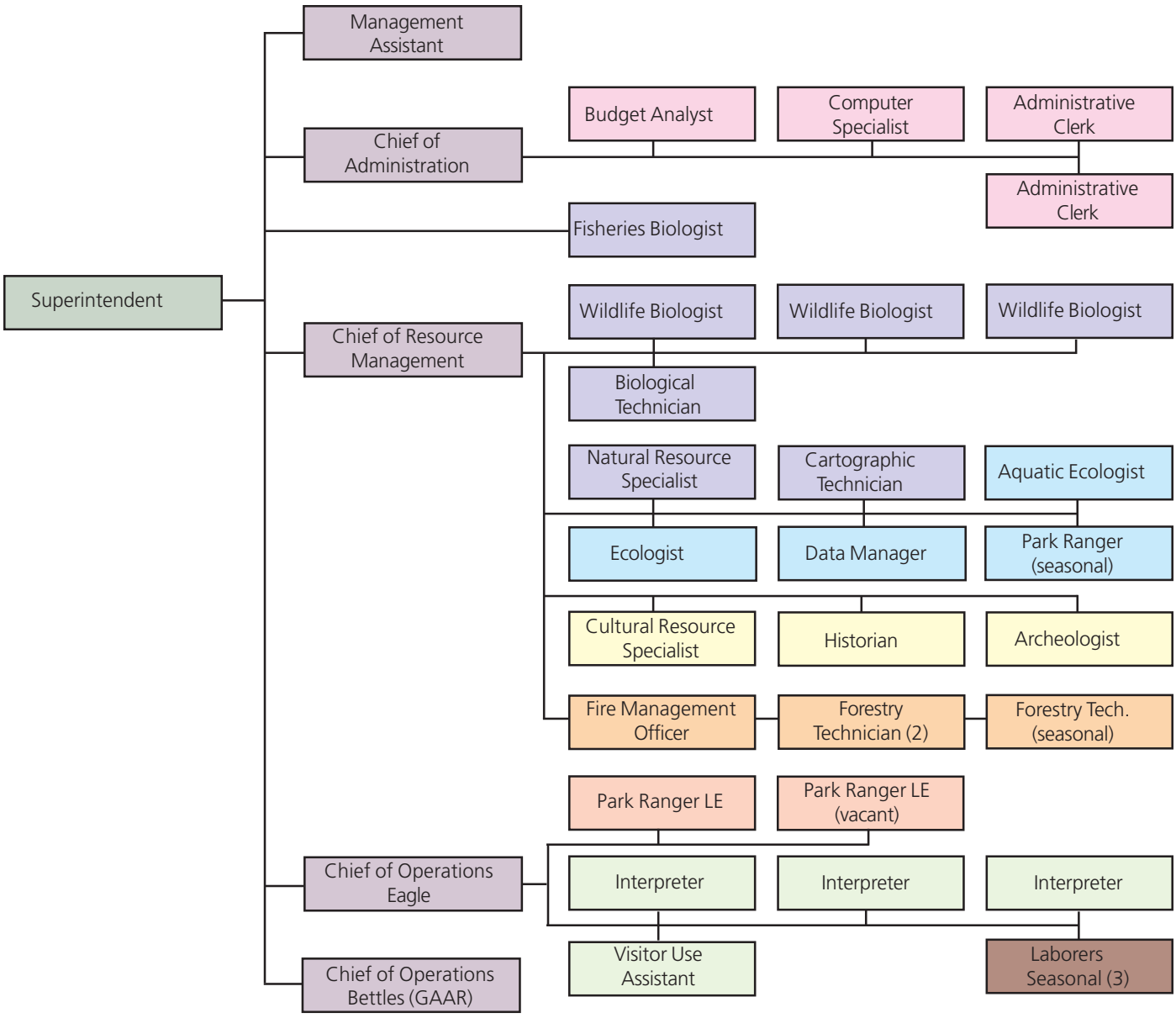
$275,000 for Management and Administration

We continued to improve our information technology system in response to increased requirements and user demands. We invested considerable effort in planning a new office in Fairbanks. The move should occur during the summer of 2006.

All Sources of Park Funding $1,931,859 total



Yukon-Charley Rivers National Preserve Organization



Note: All positions are shared with Gates of the Arctic National Park and Preserve except those under the Chief of Operations in Eagle.

"Wishing for a milkshake." Armed with headnet and GPS, Alaska Regional Fire Ecologist Jennifer Allen rests against a giant tussok while searching for markers for an old fire effects plot in Yukon-Charley Rivers National Preserve, July, 2005.

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

EXPERIENCE YOUR AMERICA

*U.S. Department of the Interior * National Park Service*